Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (currently amended) A debugging device comprising:

a first communication interface that couples the debugging device to a host computer;

a second communication interface that couples the debugging device to a target device; and

a script interpreter executing on the debugging device, the script interpreter receiving a script from the host computer via the first communication interface, the script comprising a non-compiled string of text characters, the script defining a loop that involves performing a plurality of reads from the target device, the script interpreter interpreting the script and causing the debugging device to communicate with the target device over the second communication interface such that the plurality of reads is carried out.

2. (original) The debugging device of Claim 1, wherein the script includes a loop statement, and wherein the loop statement includes an expression and at least one statement.

3. (original) The debugging device of Claim 2, wherein said at least one statement is a read statement.

4. (original) The debugging device of Claim 3, wherein the expression indicates a number, the number specifying a number of times that a read defined by said read statement is to be performed.

5. (previously presented) The debugging device of Claim 1, wherein the performing of the plurality of reads results in an amount of data being retrieved from the target device, and wherein the script includes a statement that causes the amount of data to be sent from the debugging device to the host computer.

6. (original) The debugging device of Claim 2, wherein the script includes a second statement in addition to said at least one statement.

7. (original) The debugging device of Claim 1, wherein the script is not compiled on the host computer, and wherein the script is not compiled on the debugging device.

8. (original) The debugging device of Claim 1, wherein there is no operating system stored on the debugging device.

9. (original) The debugging device of Claim 1, wherein the target device comprises an on-chip debugging circuit, and wherein the second communication interface couples the debugging device to the on-chip debugging circuit of the target device.

10. (original) The debugging device of Claim 1, wherein the script is communicated from the host computer to the debugging device as a payload of a network packet.

11. (currently amended) A method, comprising:

receiving a script from a host computer onto a hardware debugging device, the script comprising a non-compiled string of text characters, the script defining a debugging action, the debugging action requiring a plurality of sub-actions be performed;

interpreting the script;

generating a plurality of microcommands from the script; and

sending the plurality of microcommands to a target device, the microcommands causing the target device to perform the plurality of sub-actions.

12. (original) The method of Claim 11, wherein the debugging action includes a read of a block of memory locations on the target device, and wherein one of the plurality of sub-actions is a read of one of the memory locations.

13. (original) The method of Claim 12, wherein the target device includes a processor, the processor having on-chip debugging hardware, and wherein the microcommands are executed by the on-chip hardware.

14. (original) The method of Claim 12, wherein the target device includes a JTAG interface, and wherein the microcommands are received by the JTAG interface.

15. (previously presented) The method of Claim 11, wherein said interpreting of the script occurs on the hardware debugging device, and wherein the script includes a statement that causes data to be sent from the hardware debugging device to the host computer.

16. (original) The method of Claim 11, wherein the script includes a loop statement, an arithmetic operator, and a variable.

17. (original) The method of Claim 11, wherein the script includes a sleep statement.

18. (original) The method of Claim 11, wherein the script includes a break statement.

19. (original) The method of Claim 11, wherein the script includes a boolean operator.

20. (currently amended) A debugging device comprising:

a first communication interface that couples the debugging device to a host computer;

a second communication interface that couples the debugging device to a target device; and

means for receiving a script from the host computer, the script defining a debugging action to be taken with respect to the target device, the script comprising a non-compiled string of text characters, the debugging action requiring a plurality of sub-actions to occur, the means also being for interpreting the script and generating therefrom a plurality of microcommands that are sent to the target device.

21. (original) The debugging device of Claim 20, wherein the microcommands are performed by the target device such that the sub-actions occur.

22. (cancelled)

23. (original) The debugging device of Claim 20, wherein one of the sub-actions involves setting a breakpoint.

24. (original) The debugging device of Claim 20, wherein the script includes a loop statement, an arithmetic operator, and a designation of a register internal to a processor of the target device.

25. (currently amended) A debugging device comprising:

a first communication interface that couples the debugging device to a host computer;

a second communication interface that couples the debugging device to a target device; and

a script interpreter executing on the debugging device, the script interpreter receiving a script from the host computer via the first communication interface, the script comprising a non-compiled string of text characters, the script interpreter interpreting the script and causing the debugging device to communicate with the target device over the second communication interface such that a debugging action is performed.

26. (original) The debugging device of Claim 25, wherein there is no operating system stored on the debugging device.

27. (original) The debugging device of Claim 25, wherein the script includes a sleep statement.

28. (original) The debugging device of Claim 25, wherein the script includes a loop statement, and wherein the loop statement includes an expression and at least one statement.

29. (original) The debugging device of Claim 28, wherein said at least one statement is a read statement.

30. (original) The debugging device of Claim 29, wherein the expression indicates a number, the number specifying a number of times that a read defined by said read statement is to be performed.

31. (previously presented) The debugging device of Claim 1, wherein the script comprises ASCII text characters.

32. (previously presented) The method of Claim 11, wherein the script comprises ASCII text characters.

33. (previously presented) The debugging device of Claim 20, wherein the script comprises ASCII text characters.

34. (previously presented) The debugging device of Claim 25, wherein the script comprises ASCII text characters.

35. (previously presented) The debugging device of Claim 25, wherein the script comprises NULL terminated ASCII text.

36. (cancelled)

37. (new) The method of Claim 13, wherein one of the microcommands causes an operation selected from a group consisting of: stop the processor, single-step the processor, read and write to various internal registers within the processor, read and write to a data memory, set breakpoints in code executed by the processor, stuff instructions into the processor, read and write watchpoints, read status registers, and exercise and monitor the processor.